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MS. DREY: My name is Kay Drey. Twenty-five years ago when I made my first public speech on nuclear power, I knew I was an opponent, but I didn't really know why. During the interim 25 years of reading documents, asking questions and doing a lot of thinking, I have become more and more opposed. The more I learn, the more amazed I become, and, I guess, angry that this technology continues to exist, and in some desperately poor countries, continues to be promoted. By contrast, one remarkable bit of hope is that it has been 26 years since a nuclear power plant order was placed in the United States that was not subsequently canceled; 26 years with no new viable order of a nuclear plant in America.

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I realize that the hearing today is not supposed to be about nuclear power, but it is about nuclear power. The wastes that the Department of Energy wants to ship through our communities out to the Western Shoshone and Skull Valley Goshute lands would predominantly come from 103 operating nuclear reactors, plus decommissioned ones, reactors like Callaway here in Missouri.

The U.S. Congress and the Missouri legislature and related government agencies allowed the Callaway reactor, 100 miles upwind from St. Louis and 80 river miles upstream, to begin creating high-level radioactive waste, that is, irradiated fuel rods, and so-called low-level wastes began generating them in 1964 knowing that no technology and no location existed to protect the biosphere from those permanently radioactive materials. We in St. Louis use the Callaway electricity, so we in St. Louis are morally responsible for the wastes that Callaway is generating.

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No one has figured out how to keep the Callaway wastes or any others isolated for the necessary millennia, isolated from the air, water, land and living creatures. No one knows today and no one may ever know. Why then won't some important state or national leader or tenured physics professor or electric utility executive pronounce publicly, enough is enough. Many, many Americans believe that no more wastes should be generated until we figure out what to do with the wastes we already have, the wastes we have been stockpiling and shipping from place to place to place since April 24, 1942. That's when experiments first began, one mile from this convention center, to purify the uranium for the world's first self-sustaining nuclear chain reaction.

We here in St. Louis generated the first radioactive wastes of the Atomic Age. Those wastes are still strewn throughout our metropolitan area and elsewhere, and as we all know, there really is no safe solution, even for the first cupful.

These public hearings that the DOE has been required to stage under the National Environmental Policy Act do give a few brave souls the opportunity to speak about their concerns, but many people are timid about speaking on issues that seem to require technical knowledge. I believe, however, that these are moral questions more than technical ones. Everyone has or should have an opinion as to whether continuing to create permanently radioactive poisons is good or bad for today's world and for the future.

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I assume that those members of Congress who approved the first Nuclear Waste Policy Act in 1982 believed what their generous electric utility contributors had told them, that radioactive waste is just a political problem, not a technical one, and that the waste could be safely transported on our roads and rails and that a safe, permanent disposal location could be found. They maybe even were told that only a few latent cancer deaths would result. The electric utility lobbyists maybe even believed all that, but many people had challenged those claims long before Congress voted, and far more know today that radioactive waste is, of course, a political problem, a not-in-my-backyard or not-on-my-highway problem; but that it is also a technical problem.

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cont. No nuclear nation has found a safe location on the planet where wastes could be kept isolated from the  
4 biosphere for the necessary eternity and no transportation campaign or shipping container has been  
designed that could guarantee to move all this lethal mess through America's towns, over our mountains  
and across our rivers safely. No known way exists to destroy these wastes, except to let them decay until  
the radioactivity within them dies. Each radionuclide decays and emits radiation at its own particular rate,  
regardless of temperature, pressure or chemical environment, and continues to do so no matter what is  
done to it, a very long process for some radioactive materials.

To quote from a lawsuit over twenty years ago: "There are presently no physical or chemical steps which  
render this waste less toxic other than simply the passage of time." Back in 1982, the U.S. Office of  
Technology Assessment described the national high-level waste problem as follows: "Simply to load a  
single geologic repository fast enough to keep up with the projected rate of spent fuel generation in the  
year 2000, it could be necessary to package, lower into the repository and emplace about one waste  
canister every hour, 24 hours a day, 365 days a year."

5 America's Congress needs to craft a new nuclear waste policy, one that will honestly address the dangers,  
the unknowns and the true costs, the costs to the environment and to living creatures for as far into the  
6 future as anyone can imagine. The Department of Energy has already spent billions of dollars trying to  
put a happy face on the nuclear waste problem, and specifically on the Yucca Mountain location, so that  
electric utilities can continue generating nuclear power and nuclear waste.

As just one example of nuclear power's waste problem, I'd like to mention briefly, tritium, my favorite  
radioisotope. It was back in --

MR. BROWN: One minute remaining.

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cont. MS. DREY: It was back in 1977 when I first learned about tritium, or radioactive hydrogen, and about  
how much tritium Union Electric was estimating it would create here in Missouri at the Callaway Plant. I  
read that Union Electric and the U.S. Nuclear Regulatory Commission expected that the Callaway plant  
could quite possibly generate and release thousands of curies of tritium into the environment every year,  
into the air and the Missouri River through pipes and vents as a part of the routine operation of the plant.  
It would not take an accident. So I phoned a health physicist at Oak Ridge National Laboratory in  
Tennessee and asked him to tell me about tritium. He answered, "Tritium is no big deal, all it can do is  
destroy a DNA molecule." That was back in 1977 when construction of the Callaway plant had barely  
begun.

8 Nuclear power is dangerous, expensive and dirty and its poisonous by-products are permanent. Safe,  
renewable energy sources are already available. Accelerated federal funding should be invested toward  
the research, development and production of every known alternative energy option and our many bright  
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cont. engineers and scientists should be subsidized to look for more energy alternatives. Nuclear electric  
utilities should not be allowed to generate additional radioactive waste until someone someday figures out  
what to do with what we already have. Enough is enough.